FISHERY INFORMATION PACKET FOR THE PETREL BANK RED KING CRAB FISHERY, 2003

By

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ABSTRACT

This fishery information packet is intended to provide a brief overview of the red king crab *Paralithodes camtschaticus* fishery occurring in Alaska Department of Fish and Game (ADF&G) king crab Registration Area O (Aleutian Islands). This packet provides information on area description, brief historic fishery review, and summary of current management practices and policies and provides fishers and members of industry a better understanding of how the department manages the red king crab fishery in this area. Supplemental information is provided on gear requirements and registration.

INTRODUCTION

Historically, the red king crab *Paralithodes camtschaticus* resource in the Aleutian Islands was harvested in two registration areas. The Adak Registration Area consisted of those waters in the Aleutian Islands west of 171° W long. while the Dutch Harbor registration area encompassed waters east of 171° W long. In addition, as the fleet moved westward, a third registration area, Area S was established for the waters around Amchitka Island and the Petrel Bank. Area S was created in 1967 and was merged into Area R in 1978 (ADF&G 1991). At the March 1996 meeting, the Alaska Board of Fisheries (BOF) established the Aleutian Islands king crab Registration Area O by combining the existing Dutch Harbor and Adak Registration Areas. The BOF adopted this change to improve management of increasingly important golden king crab stocks in the Aleutian Islands. Combining the Adak and Dutch Harbor areas was not expected to impact management of red king crabs in the Aleutian Islands (ADF&G 1999).

Description of Registration Area O and Statistical Areas

The Aleutian Islands king crab Registration Area O has as its eastern boundary the longitude of Scotch Cap Light (164° 44' W. long.), its western boundary the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as that Maritime Boundary Agreement Line is depicted on *NOAA Chart #513* (6 Edition, February 23, 1991) and *NOAA Chart #514* (6 Edition, February 16, 1991), adopted by reference, and its northern boundary a line from the latitude of Cape Sarichef (54° 36' N. lat.) to 171° W. long., north to 55° 30' N. lat., and west to the Maritime Boundary Agreement Line (Figure 1). Area O encompasses both the waters of the Territorial Sea (0-3 nautical miles) and waters of the Exclusive Economic Zone (3-200 nautical miles).

For catch reporting purposes, the area is divided into ADF&G statistical areas, each encompassing one degree of longitude by one-half degree of latitude, except for nearshore state waters (Figure 2). All commercial removals of red king crabs, including deadloss, are reported to ADF&G in reference to these statistical areas.

Historical Fishery Perspective

Domestic fisheries for red king crabs in both the Adak (western Aleutians) and Dutch Harbor (eastern Aleutians) Registration Areas began in 1961, with effort and harvest increasing rapidly in both areas. Harvest in the Adak area reached a peak of 21 million pounds in 1964/65, while maximum harvest in the Dutch Harbor Area was reached in 1966/67 at 33 million pounds. Fluctuating harvest levels from one year to the next characterized the Aleutian Islands red king crab fishery and the general trend was one of decreasing harvest in the 1980s and 1990s (Table 1).

Because of poor fishery performance the eastern Aleutian Islands red king crab fishery was closed after the 1982/83 season and has remained closed. The western Aleutian Islands remained open until the 1995/96 fishery, when it was closed due to poor fishery performance and recruitment failure as indicated by observer data. The Aleutian Islands red king crab fishery had a maximum fishery value of nearly $20 million.

During the 1998/99 season, a limited commercial fishery was opened in two areas of the Aleutian Islands on November 1, 1998, with the provision that crabs not harvested be tagged and released. In addition, vessel operators were required to document all red king crab fishing activities in a pilot house log book and observers were required on all vessels. Guideline harvest levels (GHLs) were set using historic catch information. East of 179° W long., a GHL of 5,000 pounds was established and west of 179° E long., a GHL of 10,000 pounds was set. Closed waters included the Petrel Bank, or the area between 179° E long. and 179° W long. The department did not open the Petrel Bank area in 1998/99 since prior efforts had provided some population data from that area (Byersdorfer 1998).

Three vessels registered to harvest red king crabs in the Aleutian Islands during the 1998/99 season, but only one recorded any landings. The GHL was not reached in either open area and the fishery was closed by emergency order on July 31, 1999.

The department conducted a survey of Petrel Bank, utilizing the commercial fleet during the spring of 2001. However, because of low catches of prerecruit males and females during the spring survey, a second survey was designed for November 2001. At that time, November 1 was the regulatory opening of the Western Aleutian Islands commercial fishery and non-legal crab (prerecruit males and females) were available to the commercial fishery in prior years during November and December. Therefore the survey area was assessed again during November to address concerns of survey timing on survey results. In addition, permit terms were modified from the spring survey to address concerns of catchability of non-legal crab during the spring survey.

Results from the two surveys indicated healthy levels of legal-sized male red king crabs and a commercial fishery was opened in the Petrel Bank area during the 2002/03 season with a GHL of 500,000 pounds. Thirty-three vessels participated in the fishery and the GHL was achieved after 50 hours of fishing.

REGULATIONS

Area O is a nonexclusive registration area for all king crabs. Specific regulations governing commercial king crab fishing in Area O begin with 5 AAC 34.600 DESCRIPTION OF REGISTRATION AREA O, in the Commercial Shellfish Fishing Regulation booklet. Some of the regulations are summarized below. This section does not include all regulations pertaining to the Aleutian Islands red king crab registration area. Fishers are urged to obtain the latest commercial shellfish regulation booklet from an ADF&G office. For additional information on regulations

pertaining to this fishery, contact the ADF&G office in Dutch Harbor or Kodiak. ADF&G contacts are listed under the *Department Contacts* section of this document.

Fishing Season and Legal Gear

The Aleutian Islands red king crab fishery opens annually at NOON on October 25, according to 5 AAC 34.610 (a) FISHING SEASON FOR REGISTRATION AREA O. The area is closed on February 15, unless closed earlier by emergency order when the GHL is achieved or when indicators of stock condition, such as poor fishery performance or excessive bycatch of small or female crabs, indicate a closure is necessary to protect the long-term health of the stock.

Legal gear for the commercial red king crab fishery in Area O is limited to king crab pots that are no more than 10 feet long by 10 feet wide by 42 inches high with rigid tunnel eye openings that individually are no less than five inches in any one dimension with perimeters that are individually greater than 36 inches, or pots that are no more than 10 feet long by 10 feet wide by 42 inches high which taper inward from their base to a top consisting of one horizontal opening of any size. A complete description of legal gear for the Aleutian Islands red king crab fishery is listed in 5 AAC 34.050 LAWFUL GEAR FOR KING CRAB. All gear must be marked and tagged according to 5 AAC 34.051 KING CRAB GEAR MARKING REQUIREMENTS.

Buoy tags are available at a cost of $2.00 each from the ADF&G office in Dutch Harbor and Kodiak. Buoy tags for the Petrel Bank red king crab fishery are available beginning on the first business day following the pre-season registration deadline. For the 2003 season, tags will be available beginning October 7.

In the Petrel Bank commercial red king crab fishery no more than 1,250 total pots may be operated. For the 2003/04 season, pot limits will be set following the preseason deadline on October 6 and announced in a news release on October 7. Pot limits are established by dividing 1,250 by the number of vessels that are registered before the season begins; however, vessels 125 feet or less in overall length may operate only 4/5 of the number of pots allowed by the vessel limit. The individual vessel pot limit established for a vessel greater than 125 feet in overall length may not be more than 50 pots and for a vessel 125 feet or less in overall length may not be more than 40 pots. All pots fished for red king crabs in Area O must have at least one-third of one vertical surface of the pot composed of not less than nine-inch stretched mesh webbing; and each pot must be individually buoyed and marked. A vessel may be registered to fish in the commercial red king crab and brown king crab fisheries at the same time; however, only single line pots may be operated in areas open to red king crab fishing and only longline pots may be operated in areas open to brown king crab fishing as outlined in 5 AAC 34.625 LAWFUL GEAR FOR REGISTRATION AREA O. All pots must also be equipped with a biodegradable escape mechanism as described in 5 AAC 39.145 ESCAPE MECHANISM FOR SHELLFISH AND BOTTOMFISH POTS.

Pre-season Registration, Registration, and Tank Inspection

Pre-season registration is required for all vessels wishing to participate in the Petrel Bank red king crab fishery. The pre-season registration deadline is 5:00 p.m. October 6 as outlined in 5 AAC 34.606. (b) AREA O REGISTRATION.

In addition to vessel registration requirements with the Commercial Fisheries Entry Commission listed under 5 AAC 39.120 REGISTRATION OF COMMERCIAL FISHING VESSELS, a vessel used to take king crabs in Area O must first obtain a shellfish registration certificate from ADF&G according to provisions of 5 AAC 34.020 KING CRAB AREA REGISTRATION. Vessel registration will begin at NOON on Wednesday, October 22 in Dutch Harbor, Adak, and King Cove.

In order for the shellfish vessel registration to be valid, a catcher vessel must have all live tanks inspected by a department representative as specified in 5 AAC 34.030 INSPECTION REQUIREMENTS. In addition, catcher-processor vessels must have all freezers and live tanks inspected. Dry-tanked vessels do not require a tank inspection. Tank inspections are required to ensure that vessels are not in possession of king crabs prior to the start of a fishery. Vessels intending to participate in the Aleutian Islands red king crab fishery are required to register and have their holds inspected in Dutch Harbor, Adak, Akutan, or King Cove within 72 hours before taking or processing red king crab according to 5 AAC 34.640 REGISTRATION AREA O INSPECTION AND INSPECTION POINTS. Vessel tank inspections prior to gear loading will be available beginning at 9:00 AM, Monday, October 20 in Dutch Harbor, Adak, Akutan and King Cove.

Operation of Other Gear

Regulations found in 5 AAC 34.628. OPERATION OF OTHER GEAR IN REGISTRATION AREA O, state that a person or vessel that operates longline, trawl, or pot gear in waters less than 125 fathoms in depth in a commercial, subsistence, personal use, or sport fishery in that portion of Registration Area O open to commercial red king crab fishing 30 days immediately before the scheduled opening date of the commercial red king crab fishery may not participate in the commercial red king crab fishery.

Landing and Pot Storage Requirements

As outlined in 5 AAC 34.641 LANDING REQUIREMENTS FOR REGISTRATION AREA O, vessels that fished for red king crabs in Registration Area O may not have that species of king crab on board after 72 hours following the closure if delivery is made to processors in Dutch Harbor, Adak, Akutan, or King Cove. Vessels delivering to King Cove or a port east thereof may request additional time to transit directly to the processing location by contacting ADF&G in Dutch Harbor within 72 hours following the closure.

During a closed season, king crab pots must be removed from the water. However, according to 5 AAC 34.052. KING CRAB GEAR STORAGE REQUIREMENTS pots with all bait and bait containers

removed and all doors secured fully open may be stored in waters 25 fathoms or greater in depth for up to 72 hours following the closure. Thereafter, single pots may be stored in waters 25 fathoms or less in depth and longline king crab pots may be stored in waters 75 fathoms or less in depth. According to 5 AAC 34.627. KING CRAB GEAR STORAGE REQUIREMENTS FOR REGISTRATION AREA O, pots may not be stored in waters east of 169° W long. from June 1 through August 15; in Hot Springs Bay, inside of a line from the tip of Ridge Point to 54° 12' 40" N lat., 165° 52' W long.; and in Kalekta Bay, inside of a line from the tip of Erskine Point to the tip of Cape Kalekta.

There are no regulations in place that address leaving baited gear on the grounds if short advance notice of the closure is given. Fishers are expected to attempt to bring all gear into legal configuration by the time of the closure. If baited gear is left on the grounds after the closure announcement, fishers should contact the department in Dutch Harbor or the Alaska State Troopers aboard the P/V Stimpson as early as possible.

Legal Size Limit

The legal size of red king crabs that may be harvested in Registration Area O is six and a half inches or greater in shell width as outlined in 5 AAC 34.620 SIZE LIMITS FOR REGISTRATION AREA O. Only male crabs can be harvested. All other animals taken incidentally must be immediately returned, unharmed, to the sea.

Onboard Observer Program

Observers are required on all vessels participating in the Petrel Bank red king crab fishery. Scheduling of observers and all observer costs are the responsibility of the vessel. A limited number of observer briefings and debriefings will be available in Adak, most will occur in Dutch Harbor. For additional information contact the observer program in Dutch Harbor (Appendix A).

FISHERIES MANAGEMENT

Western Aleutian Islands pot surveys conducted from 1975 to 1977 provided CPUE (catch per unit of effort, defined as number of legal crabs per pot lift), fecundity, and relative abundance information (ADF&G 1978). Pot surveys were conducted on an annual basis in the Dutch Harbor Area until 1990 when trawl surveys were implemented to survey larger areas in a more timely fashion and to reduce gear selectivity inherent to pot fishing activities (Urban 1992). In the late 1970s, guideline harvest level (GHL) ranges were established using a blend of pot survey results and fisheries data. Historic fishery GHLs set in the late 1970s ranged from 8.0 million to 26 million pounds for Dutch Harbor and from 0.5 million to 3.0 million pounds in Adak (ADF&G 1978). GHLs were often modified in season based on fishery performance.

In order to address concerns for red king crab abundance in the Petrel Bank area, a survey was conducted in January/February and November, 2001. Because of budget constraints, the survey was designed so that fishers could retain and sell all legal male red king crabs captured to cover survey expenses. The commissioner's permit specified stations to be fished, soak times, and effort levels.

Capture of red king crabs from both of the 2001 surveys and the 2002/03 fishery in the Petrel Bank area indicate healthy levels of legal males. CPUE for the combined surveys was 28 and CPUE during the 2002/03 commercial fishery was 18. Survey CPUEs are not directly comparable to previous commercial fishery CPUE because pot lifts in prior commercial fisheries were not conducted in a systematic manner and may have occurred in different fishing locations (Bowers et al. 2002). Captured sublegal male and female crabs per pot for the combined surveys was one and two respectively.

Size frequency data from the 2001 surveys and 2002/03 commercial season were comparable to the size composition that was found in catches prior to the 1995/96 fishery closure. The size frequency during the surveys, indicated that approximately 84% of the sampled legal-size crabs were post recruits and over 82% of the crabs had new shells. During the 2002/03 fishery the number of new-shelled crabs declined to 77%, while the percentage of post-recruits also declined to 74%. From 1990 to 1994, CPUE and bycatch of sublegal crabs greatly declined. Similar to the surveys conducted in the mid 1990s, very few sublegal crabs were captured during the 2001 surveys or the 2002/03 fishery.

GUIDELINE HARVEST LEVEL AND OUTLOOK FOR THE 2003 FISHERY

Due to the improved harvest of legal crab during the 2001 surveys and high catch rates during the 2002/03 fishery, the department is opening a limited red king crab commercial fishery in the Petrel Bank with a GHL of 500,000 pounds. This is considered the minimum GHL that can be managed inseason. The GHL applies to those waters west of 179° W long., east of 179° E long., and north of 51°45' N lat. Only those waters in the above described area that are 125 fathoms or less in depth will be open to fishing for red king crabs.

Shell-age and size composition data indicate that primarily older, post-recruit crabs support the Petrel Bank red king crab fishery. Proportions of sublegal and female red king crabs did not change significantly from the 2001 surveys or the 2002/03 commercial fishery, although the number of postrecruit crabs dropped slightly during the commercial fishery. Sublegal male crabs comprised a smaller portion of the catch in 2001 and 2002/03 than in the early 1990s prior to the fishery closure. Currently there is little evidence of multiple size classes on the grounds. Observer bycatch data indicated a hint of small crabs (76 – 100 mm) captured during the 2002/03 fishery (2%), which were not seen in the 2001 surveys (Figure 3).

Because of the uncertainty in the status of sublegal and female red king crab and to provide overall stock protection, the department will close the fishery prior to achieving the GHL if legal male CPUE is low. Maintaining moderate legal-male CPUE will help protect the stock against

localized depletion, promote rebuilding, and help maintain multiple size and age classes on the grounds. Commercial fishery legal-male CPUE should remain at 10 crabs/pot or greater. A CPUE of 10 crabs/pot is approximately one third the CPUE attained in the 2001 surveys during which 1,198 pot lifts occurred. The maximum number of pot lifts to harvest 500,000 pounds with a CPUE of 10 is 7,700 pot lifts. This CPUE level will prevent fishing at levels that preceded the mid-90s fishery closure. From the 1993/94 through the 1995/96 seasons, pot lifts ranged from 2,200 to over 18,000 per season and legal-male CPUE ranged from two to nine crabs.

Using a threshold CPUE of 10 is an approach more conservative than used in other king crab fisheries and should help maintain the long term health of the stock. If cumulative commercial fishery CPUE drops below this level, the department will close the fishery inseason. If the fishery does not maintain the threshold level for two consecutive seasons, the fishery would be closed for the next two seasons, after which a stock-assessment survey will be employed to assess stock condition. This harvest strategy incorporates a minimum GHL and minimum CPUE. Inseason and post-season fishery analysis will be used to judge whether the fishery is achieving the CPUE threshold level. If supported by fishery performance trends, the harvest could be increased above 500,000 pounds in the future.

Inseason management will be based on observer reports, which will be relayed to the department twice daily via electronic mail or single side band radio. The department will attempt to provide 12 hours advance notice of the fishery closure, however fishers are advised that shorter advance notice is likely to occur. The Petrel Bank red king crab fishery is expected to be short in duration, and could last less than three days. The closure announcement will be provided to fishers via single side band radio on frequency 4125 kHz. Fishers should monitor that frequency while the fishery is open as updates could occur at any time and the time interval between the closure announcement and the fishery closure could be relatively short.

DEPARTMENT CONTACTS

Contacts for ADF&G in Dutch Harbor are Forrest R. Bowers, Area Management Biologist; Karla Granath, Assistant Area Management Biologist; Barbi Failor-Rounds, CDQ/Groundfish Management Biologist; Mary Schwenzfeier, Shellfish Observer Program Coordinator; and Shari Coleman, Assistant Observer Program Coordinator. The ADF&G phone number in Dutch Harbor is (907) 581-1239, and the fax number is (907) 581-1572.

Department contacts in Kodiak are Wayne Donaldson, Regional Shellfish/Groundfish Management Biologist; Mike Ruccio, Kodiak Island/Alaska Peninsula Area Shellfish/ Groundfish Management Biologist; and Mike Cavin, Assistant Area Shellfish/Groundfish Biologist. The ADF&G phone number in Kodiak is (907) 486-1840, and the fax number is (907) 486-1824.

A complete listing of contact persons by agency and location is listed in Appendix A.

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Table 1. Aleutian Islands, Area O, red king crab commercial fishery data, 1960/1961 - 2002/2003.

Season	Locale	Number of			Harvest[b,c]	Pots		Average		Deadloss[c]
		Vessels[a]	Landings	Crabs[b]		Lifted	CPUE[d]	Weight[c]	Length[e]	
1960/61	East of 172°	NA	NA	NA	NA	NA	NA	NA	NA	NA
	West of 172°	4	41	NA	2,074,000	NA	NA	NA	NA	NA
	TOTAL									
1961/62	East of 172°	4	69	NA	533,000	NA	NA	NA	NA	NA
	West of 172°	8	218	NA	6,114,000	NA	NA	NA	NA	NA
	TOTAL		**287**		**6,647,000**					
1962/63	East of 172°	6	102	NA	1,536,000	NA	NA	NA	NA	NA
	West of 172°	9	248	NA	8,006,000	NA	NA	NA	NA	NA
	TOTAL		**350**		**9,542,000**					
1963/64	East of 172°	4	242	NA	3,893,000	NA	NA	NA	NA	NA
	West of 172°	11	527	NA	17,904,000	NA	NA	NA	NA	NA
	TOTAL		**769**		**21,797,000**					
1964/65	East of 172°	12	336	NA	13,761,000	NA	NA	NA	NA	NA
	West of 172°	18	442	NA	21,193,000	NA	NA	NA	NA	NA
	TOTAL		**778**		**34,954,000**					
1965/66	East of 172°	21	555	NA	19,196,000	NA	NA	NA	NA	NA
	West of 172°	10	431	NA	12,915,000	NA	NA	NA	NA	NA
	TOTAL		**986**		**32,111,000**					
1966/67	East of 172°	27	893	NA	32,852,000	NA	NA	NA	NA	NA
	West of 172°	10	90	NA	5,883,000	NA	NA	NA	NA	NA
	TOTAL		**983**		**38,735,000**					

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Table 1. (Page 2 of 6)

Season	Locale	Number of Vessels[a]	Number of Landings	Number of Crabs[b]	Harvest[b,c]	Pots Lifted	CPUE[d]	Average Weight[c]	Average Length[e]	Deadloss[c]
1967/68	East of 172°	34	747	NA	22,709,000	NA	NA	NA	NA	NA
	West of 172°	22	505	NA	14,131,000	NA	NA	NA	NA	NA
	TOTAL		**1,252**		**36,840,000**					
1968/69	East of 172°	NA	NA	NA	11,300,000	NA	NA	NA	NA	NA
	West of 172°	30	NA	NA	16,100,000	NA	NA	NA	NA	NA
	TOTAL				**27,400,000**					
1969/70	East of 172°	41	375	NA	8,950,000	72,683	NA	NA	NA	NA
	West of 172°	33	435	NA	18,016,000	115,929	NA	6.5	NA	NA
	TOTAL		**810**		**26,966,000**	**188,612**				
1970/71	East of 172°	32	268	NA	9,652,000	56,198	NA	NA	NA	NA
	West of 172°	35	378	NA	16,057,000	124,235	NA	NA	NA	NA
	TOTAL		**646**		**25,709,000**	**180,433**				
1971/72	East of 172°	32	210	1,447,692	9,391,615	31,531	46	7	NA	NA
	West of 172°	40	166	NA	15,475,940	46,011	NA	NA	NA	NA
	TOTAL		**376**		**24,867,555**	**77,542**				
1972/73	East of 172°	51	291	1,500,904	10,450,380	34,037	44	7		
	West of 172°	43	313	3,461,025	18,724,140	81,133	43	5.4	NA	NA
	TOTAL		**604**	**4,961,929**	**29,174,520**	**115,170**	**43**	**5.9**		
1973/74	East of 172°	56	290	1,780,673	12,722,660	41,840	43	7.1	NA	NA
	West of 172°	41	239	1,844,974	9,741,464	70,059	26	5.3	148.6	NA
	TOTAL		**529**	**3,625,647**	**22,464,124**	**111,899**	**32**	**6.2**		

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Table 1. (Page 3 of 6)

Season	Locale	Number of Vessels[a]	Number of Landings	Number of Crabs[b]	Harvest[b,c]	Pots Lifted	CPUE[d]	Average Weight[c]	Average Length[e]	Deadloss[c]
1974/75	East of 172°	87	372	1,812,647	13,991,190	71,821	25	7.7		
	West of 172°	36	97	532,298	2,774,963	32,620	16	5.2	148.6	NA
	TOTAL		**469**	**2,344,945**	**16,766,153**	**104,441**	**22**	**7.1**		
1975/76	East of 172°	79	369	2,147,350	15,906,660	86,874	25	7.4		
	West of 172°	20	25	79,977	411,583	8,331	10	5.2	147.2	NA
	TOTAL		**394**	**2,227,327**	**16,318,243**	**95,205**	**23**	**7.3**		
1976/77	East of 172°	72	226	1,273,298	9367965[f]	65,796	19	7.4		
	East of 172°	38	61	86,619	830458[g]	17,298	5	9.6	NA	NA
	West of 172°				F I S H E R Y C L O S E D					
	TOTAL		**287**	**1,359,917**	**10,198,423**	**83,094**	**16**	**7.5**		
1977/78	East of 172°	33	227	539,656	3658860[f]	46,617	12	6.8		
	East of 172°	6	7	3,096	25557[h]	812	4	8.3	NA	NA
	West of 172°	12	18	160,343	905,527	7,269	22	5.7	152.2	NA
	TOTAL		**252**	**703,095**	**4,589,944**	**54,698**	**13**	**6.5**		
1978/79	East of 172°	60	300	1,233,758	6,824,793	51,783	24	5.5	NA	NA
	West of 172°	13	27	149,491	807,195	13,948	11	5.4	NA	1,170
	TOTAL		**327**	**1,383,249**	**7,631,988**	**65,731**	**21**	**5.5**		
1979/80	East of 172°	104	542	2,551,116	15,010,840	120,554	21	5.9	NA	NA
	West of 172°	18	23	82,250	467,229	9,757	8	5.7	152	24,850
	TOTAL		**565**	**2,633,366**	**15,478,069**	**130,311**	**20**	**5.9**		
1980/81	East of 172°	114	830	2,772,287	17,660,620[f]	231,607	12	6.4	NA	NA
	East of 172°	54	120	182,349	1,392,923[h]	30,000	6	7.6		
	West of 172°	17	52	254,390	1,419,513	20,914	12	5.6	149	54,360
	TOTAL		**1,002**	**3,209,026**	**20,473,056**	**282,521**	**11**	**6.4**		

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Table 1. (Page 4 of 6)

Season	Locale	Number of Vessels[a]	Number of Landings	Number of Crabs[b]	Harvest[b,c]	Pots Lifted	CPUE[d]	Average Weight[c]	Average Length[e]	Deadloss[c]
1981/82	East of 172°	92	683	741,966	5,155,345	220,087	3	6.9	NA	NA
	West of 172°	46	106	291,311	1,648,926	40,697	7	5.7	148.3	8,759
	TOTAL		**789**	**1,033,277**	**6,804,271**	**260,784**	**4**	**6.6**		
1982/83	East of 172°	81	278	64,380	431,179	72,924	1	6.7		
	West of 172°	72	191	284,787	1,701,818	66,893	4	6.0	150.8	7,855
	TOTAL		**469**	**349,167**	**2,132,997**	**139,817**	**3**	**6.1**		
1983/84	East of 172°				F I S H E R Y C L O S E D					
	West of 172°	106	248	298,948	1,981,579	60,840	5	6.6	157.3	3,833
	TOTAL	**106**	**248**	**298,948**	**1,981,579**	**60,840**	**5**	**6.6**	**157.3**	**3,833**
1984/85	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	64	113	206,751	1,367,672	50,685	4	6.6	155.1	0
	TOTAL	**64**	**113**	**206,751**	**1,367,672**	**50,685**	**4**	**6.6**	**155.1**	**0**
1985/86	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	35	89	162,271	906,293	32,478	5	5.6	152.2	6,120
	TOTAL	**35**	**89**	**162,271**	**906,293**	**32,478**	**5**	**5.6**	**152.2**	**6,120**
1986/87	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	33	69	126,146	712,243	29,189	4	5.6	NA	500
	TOTAL	**33**	**69**	**126,146**	**712,243**	**29,189**	**4**	**5.6**	**NA**	**501**
1987/88	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	71	109	211,712	1,213,933	43,433	5	5.7	148.5	6,900
	TOTAL	**71**	**109**	**211,712**	**1,213,933**	**43,433**	**5**	**5.7**	**148.5**	**6,900**
1988/89	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	73	156	266,053	1,567,314	64,374	4	5.9	153.1	557
	TOTAL	**73**	**156**	**266,053**	**1,567,314**	**64,374**	**4**	**5.9**	**153.1**	**557**

-Continued-

Table 1. (Page 5 of 6)

Season	Locale	Number of Vessels[a]	Number of Landings	Number of Crabs[b]	Harvest[b,c]	Pots Lifted	Pots CPUE[d]	Average Weight[c]	Average Length[e]	Deadloss[c]
1989/90	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	56	123	196,070	1,118,566	54,513	4	5.7	151.5	759
	TOTAL	**56**	**123**	**196,070**	**1,118,566**	**54,513**	**4**	**5.7**	**151.5**	**759**
1990/91	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	7	34	146,903	828,105	10,674	14	5.6	148.1	0
	TOTAL	**7**	**34**	**146,903**	**828,105**	**10,674**	**14**	**5.6**	**148.1**	**0**
1991/92	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	10	35	165,356	951,278	16,636	10	5.7	149.8	0
	TOTAL	**10**	**35**	**165,356**	**951,278**	**16,636**	**10**	**5.7**	**149.8**	**0**
1992/93	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	12	30	218,049	1,286,424	16,129	13	6.0	151.5	5,000
	TOTAL	**12**	**30**	**218,049**	**1,286,424**	**16,129**	**13**	**6.0**	**151.5**	**5,000**
1993/94	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	12	21	119,330	698,077	13,575	9	5.8	154.6	7,402
	TOTAL	**12**	**21**	**119,330**	**698,077**	**13,575**	**9**	**5.8**	**154.6**	**7,402**
1994/95	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	20	31	30,337	196,967	18,146	2	6.5	157.5	1,430
	TOTAL	**20**	**31**	**30,337**	**196,967**	**18,146**	**2**	**6.5**	**157.5**	**1,430**
1995/96	East of 171°				F I S H E R Y C L O S E D					
	West of 171°	4	12	6,880	38,941	2,205	3	5.7	153.6	235
	TOTAL	**4**	**12**	**6,880**	**38,941**	**2,205**	**3**	**5.7**	**153.6**	**235**
1996/97					F I S H E R Y C L O S E D					
1997/98					F I S H E R Y C L O S E D					

-Continued-

Table 1. (Page 6 of 6)

Season	Locale	Number of Vessels[a]	Number of Landings	Number of Crabs[b]	Harvest[b,c]	Pots Lifted	CPUE[d]	Average Weight[c]	Average Length[e]	Deadloss[c]
1998/99	West of 174°	3	6	749	5,900	102	7	7.9	NA	0
2000/2001[i]	Petrel Bank[j]	1	3	11,257	76,792	498	23	6.8	161.0	0
2001/2002[k]	Petrel Bank[j]	4	5	22,080	153,961	700	32	7.0	159.5	82
2002/2003	Petrel Bank[l]	33	35	68,300	505,642	3,782	18	7.4	162.4	1,311

[a]Many vessels fished both east and west of 171° W long., thus total number of vessels reflects registrations for entire Aleutian Islands.

[b]Deadloss included.

[c]In pounds.

[d]Number of legal crabs per pot lift.

[e]In millimeters.

[f]Split season based on 6.5 inch minimum legal size.

[g]Split season based on 8 inch minimum legal size.

[h]Split season based on 7.5 inch minimum legal size.

[i]January/February Petrel Bank survey (fish ticket harvest code 15).

[j]Those waters of king crab Registration Area O between 179° E long., 179° W long., and north of 51°45' N lat.

[k]November Petrel Bank survey (fish ticket harvest code 15).

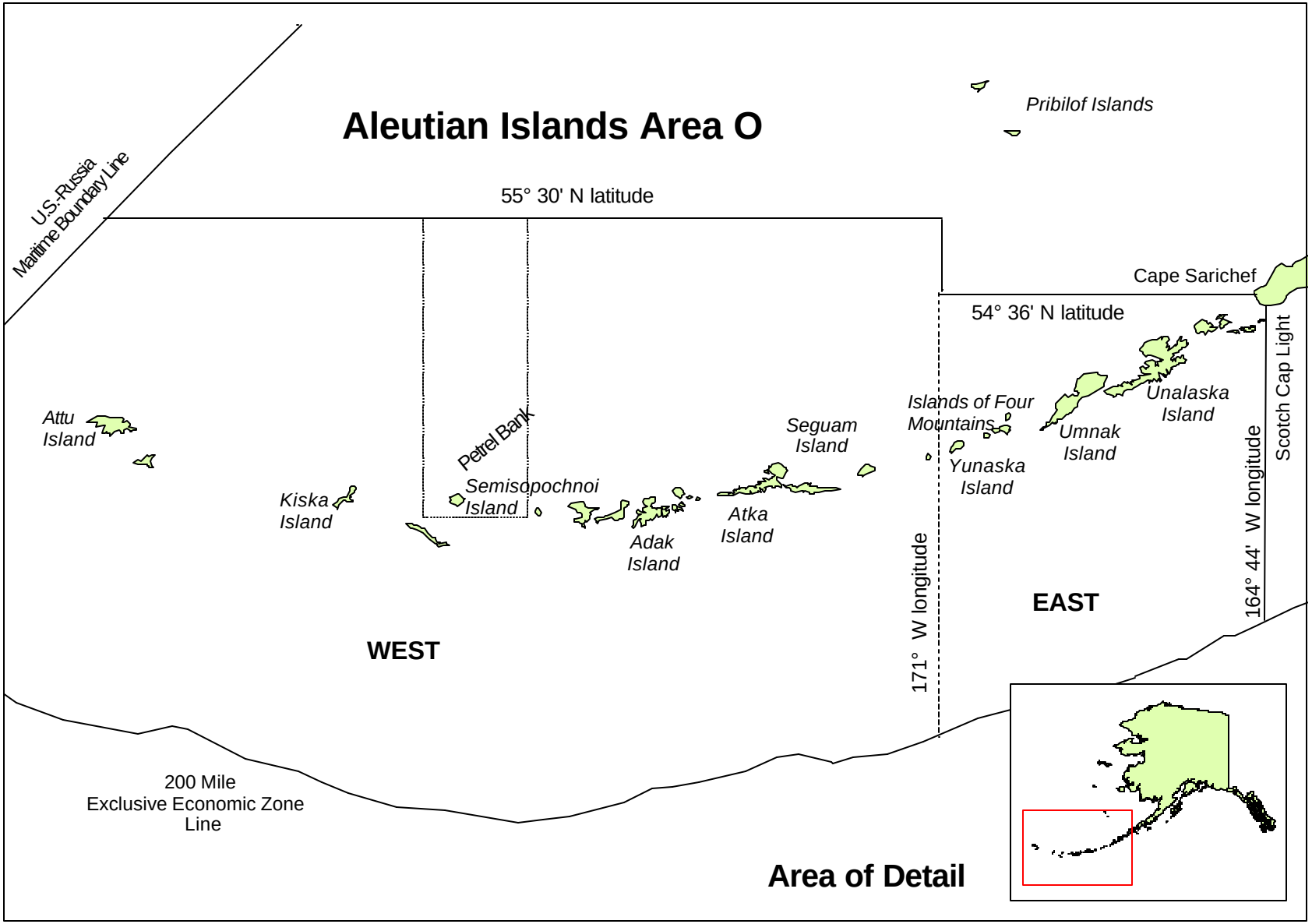

Figure 1. King crab Registration Area O.

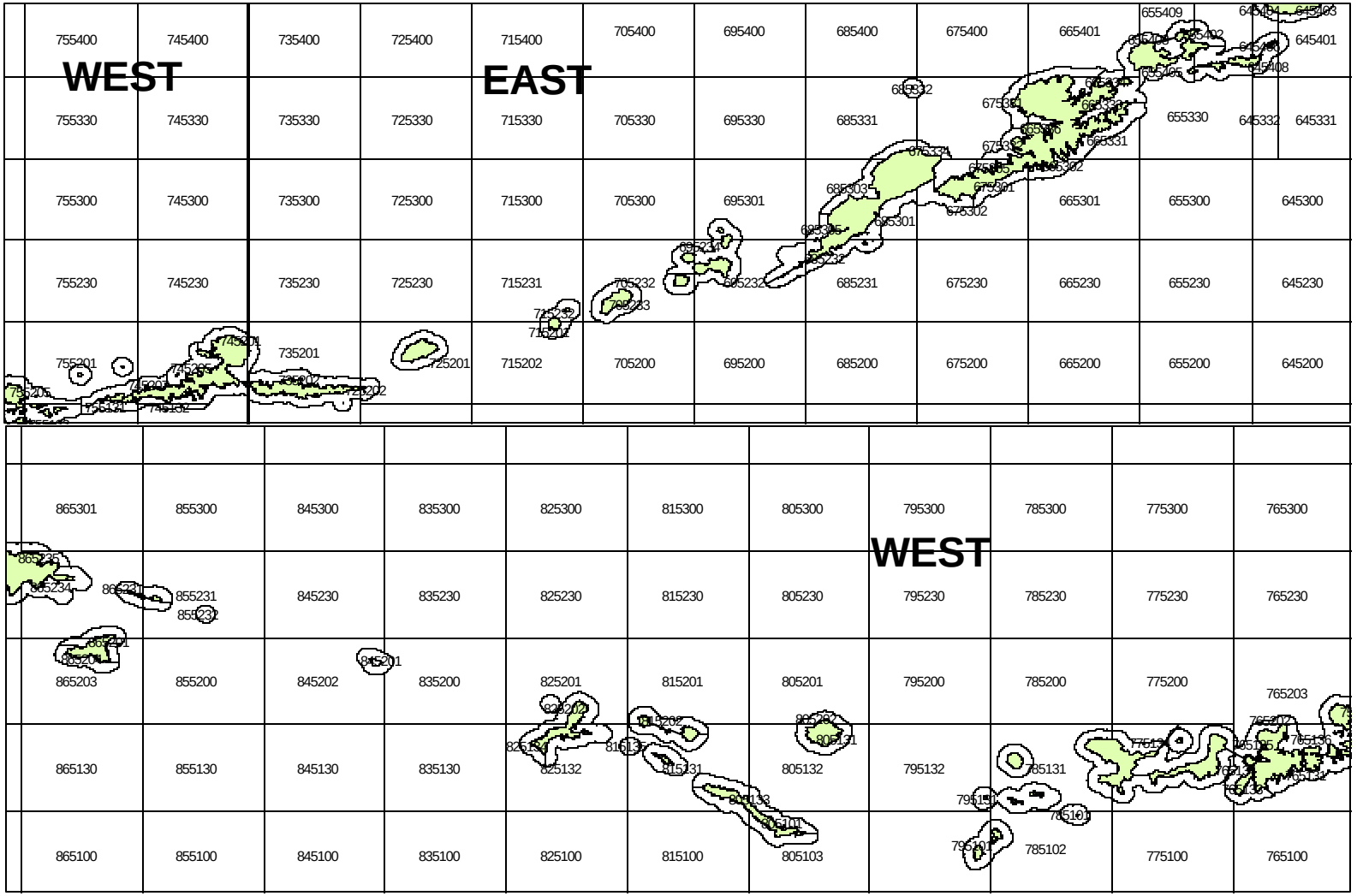

Figure 2. Statistical area map of king crab Registration Area O.

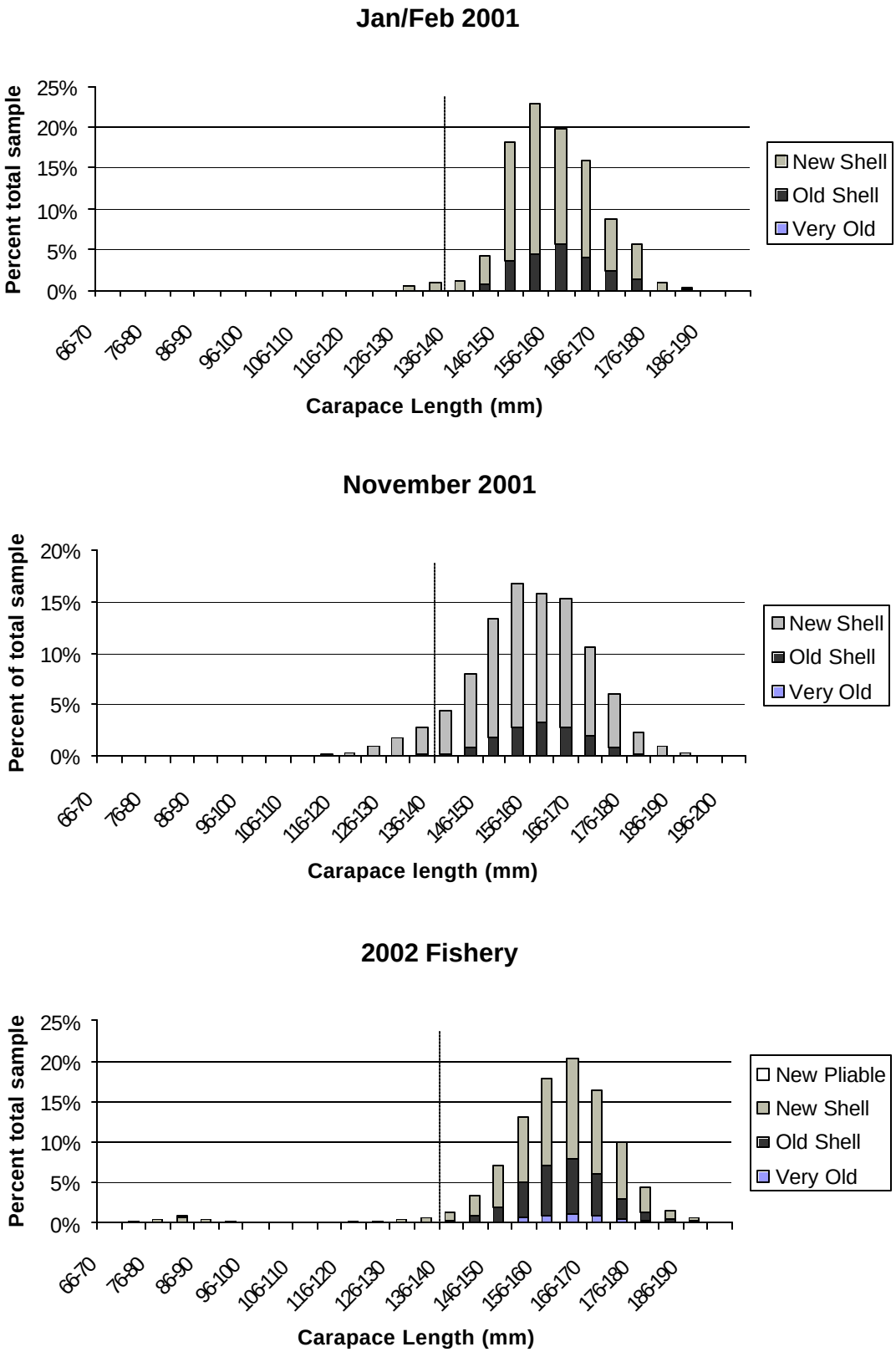

Figure 3. Size frequency distribution of Petrel Bank male red king crabs from observer bycatch data for the 2001 surveys and 2002/30 fishery. Legal size (>= 135 mm) denoted with broken line.

APPENDIX

Appendix A. List of contact persons, by agency and location.

Alaska Department of Fish and Game Web site**:** http: //www.cf.adfg.state.ak.us/region4/rgn4home.htm

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